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A NEW ANT OF THE GENUS *AMBLYOPONE* FROM PANAMA¹

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As known before 1960, the genus *Amblyopone* in the New World was restricted to temperate North America and the southern half of South America. In my 1960 review of the Amblyoponini (Bull. Mus. Comp. Zool., 122: 143-230) I described as new *A. orizabana* from Mt. Orizaba in southern Mexico, and the aberrant *A. mystriops* from Guatemala. In a very recent paper, Kempf [1961, Studia Ent., Petropolis, Brazil (n. s.) 4: 489] has recorded *A. degenerata* Borgmeier — previously known only from southern Brazil — as being collected in Surinam. Now, a new species, to be described below, has been found in lowland forest on the Isthmus of Panama, closing the last significant gap in the distribution of *Amblyopone* in this hemisphere. The genus is now seen to range from British Columbia and the St. Lawrence Valley south into southern Chile, and it seems likely that it reaches Tierra del Fuego, even though no specimens have yet come in from that far south. As it stands, *Amblyopone* is the most widely distributed New World ant genus. While it is clear that the genus is very sparsely distributed in the tropics, and that it reaches its best development in cool temperate regions to the north and south, it does seem likely that further collecting will show it to have a continuous or near-continuous range in all but the driest and coldest parts of the Americas.

Amblyopone tropicalis sp. nov.

Holotype worker: TL 3.0, HL (including clypeal teeth) 0.60, HW 0.52 (CI 87), WL 0.74, petiolar node L 0.26, W 0.35, post-petiole W 0.38, scape L 0.34, outside straightline length of mandible 0.46 mm.; measurements as in my 1960 review.

Habitus that of the smaller "*Fulakora*" group of *Amblyopone*, especially *A. orizabana* Brown and *A. chilensis* Mayr. Head with nearly straight (feebly sinuate) occipital border, sides feebly convex, diverging anteriad, widest across anterior corners, which are furnished

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with small but acute genal teeth. Frontal lobes approximate, separated only by a narrow linear groove. Anterior clypeal apron gently convex in outline, with 5 large truncate teeth, of which the middle tooth is much the largest, being composed of two median teeth completely fused to about their apices, and projecting nearly twice as far as the smaller teeth close on each side of them; corner (lateral clypeal) teeth still shorter, each composed of a mesal and a smaller lateral element which are fused at the base. Mandibles rather slender, their external margins feebly convex (almost straight along basal $2/3$), inner margins convex except for apical quarter, each bearing 7 teeth: a triangular basal tooth, followed by a spaced series of 5 acute, slightly recurved teeth, of which each of the distal 3 or 4 has a shorter dorsal spur (difficult to see in normal full-face view) representing the vestigial twin of a pair common in species of this group; an indistinct reclinate tooth lies near the narrow mandibular apex. The mandibles when closed cross each other, but leave a fairly large triangular space between themselves and the clypeal margin. Antennal scapes short and rather broad (thinnest near their midlength), feebly sigmoidal, reaching back to about the posterior fifth of the head length. Funiculus 11-segmented, conspicuously enlarged apicad, but gradually so, without a definite number of segments in the club; all segments except first and apical broader than long. No eyes detected.

Alitrunk feebly convex in profile; as seen from above, broadest across the middle pronotum; promesonotal suture apparently flexible and accompanied by a strong groove along the anterior mesonotal border, at alitruncal midlength. Mesonotum transverse, forming narrowest point of alitrunk; metanotal groove distinct but shallow; propodeal dorsum broader than long, its sides diverging posteriad; declivity plane, rounding into dorsum, much broader than high. Inferior borders of pronotum broadly rounded.

Petiolar node sessile, with vertical anterior and horizontal dorsal faces both convex, the dorsal face broader than long as seen from above. Ventral process of petiole a rounded, forward-thrust lobe with a conspicuous oval thinned area or fenestra. Postpetiole broader than petiole, but shorter, and also shorter than the succeeding segment, which is the widest. Gastric apex not laterally compressed; sting stout. Legs robust; femora flattened and incrassate; tibial spur vestigial on middle legs, but on each hind tibia there is a short but very thick, curved, pectinate tibial spur and an adjacent, much smaller, straight, slender spur.

Head densely reticulate-punctulate and opaque. Antennal scapes,

mandibles and clypeus obscurely longitudinally striate-punctate, opaque to subopaque. Lower sides of propodeum with the usual faint longitudinal striae. Remainder of body smooth or nearly smooth and shining, with fine spaced punctures, these most dense on petiolar dorsum and on two succeeding segments, where integument almost appears loosely coriaceous in some lights, but is still definitely shining.

Pubescence appressed and subappressed, moderately dense, generally distributed over body and appendages (not on sides of alitrunk); erect pilosity short, mostly oblique, moderately abundant, becoming longer on gastric apex, antennal apices and mandibles; very sparse on legs. Color ferruginous yellow, the head capsule very slightly darker, appendages somewhat lighter.

Paratype female (dealate): TL 3.1, HL 0.65, HW 0.57 (CI 88), WL 0.91, petiolar node L 0.26, W 0.38, scape L 0.37, greatest diameter of compound eye 0.11 mm.

Similar to the holotype worker, but with the usual differences of caste: fairly large compound eyes (no eyes could be detected in the worker), ocelli developed and with blackened calli, wing stumps present and blackened; meso- and metathoracic flight sclerites well developed, but rather flat, continuing the weakly convex surface of the alitrunk without major interruption. As usual for females of this genus, the petiole and gaster are relatively a little wider than in the worker, and the head, while still light ferruginous, is a trifle darker than in the worker. Alitrunk also rather coarsely and closely punctate above, but still distinctly shining.

The holotype worker and female paratype, the only adults taken, were found on Barro Colorado Island, Panama Canal Zone, on January 6, 1960 [W. L. Brown, Jr., leg.], and deposited in the Museum of Comparative Zoology. The specimens were found together with a few larvae and pupae in a cavity in the underside of a small rotten branch lying in moist leaf litter on the forest floor, in what is variously described as rain forest or monsoon forest, close to Snyder-Molino Trail and less than 100 meters from the Laboratory Clearing of the Smithsonian Institution's Canal Zone Biological Area. These specimens were the very first ants I collected during a three-week stay on the island. When first collected, they were mistaken for *Prionopelta*, a related genus found very rarely on the island, but common elsewhere in Central and South America. After closer examination revealed their true identity, I searched energetically for the species in likely habitats for the remainder of my stay, as did my companion, Dr. E. S. McCluskey, but we never found it again. This is only one

of many ant species that have been collected on Barro Colorado a single time, despite the very intensive collecting of its whole area by several ant specialists, as well as the long-time Resident Naturalist, James Zetek. It has been said that Barro Colorado is so well collected for ants that scarcely anything in the way of new species can be collected there. That McCluskey and I, engaged in what was primarily an ecological survey not particularly directed toward the finding of novelties, were able to find this *Amblyopone* and at least two other undescribed ant species in the square mile centered on the Laboratory Clearing, speaks for the virtual inexhaustibility of the island's ant fauna and for the richness of tropical forest faunas in general.

In the key to the New World *Amblyopone* in my 1960 review (p. 191 to 192), *A. tropicalis* runs to couplet 8, where its intermediate size makes it fall ambiguously into either 8 or 9. Of the three species in these two couplets [*orizabana* Brown, *bierigi* (Santschi), *chilensis* Mayr], *A. tropicalis* is closest to *orizabana* in structure and to *chilensis* in size, but differs from these in the reduced number of teeth in the clypeal armament, in the strongly projecting, large median fusion tooth, and in the nearly obsolete dorsal members of the mandibular double teeth, rendering the tooth row apparently single as seen from dorsal view. *A. tropicalis* is larger than *orizabana*, has relatively longer and more slender mandibles and a broader head.